Coast Guard Year 2000 (Y2K) Efforts/

Talking Points for Assistant Commandants/Directors

Area/District/MLC Commanders

For Use in Internal or External Speaking Opportunities

The Y2K problem (inability of computers programmed with 2-digit date fields to recognize "00" as the year 2000) has been called the greatest information technology challenge that the modern world has faced. It is expected to cost the Coast Guard between $50 - 60M, the U. S. Government $10B-$12B, U. S. business >$50B. Worldwide costs will run from $300B - $600B. Litigation spinning off the problem may exceed $1Trillion.

The Coast Guard reports 74 mission critical systems to the Office of Management and Budget (OMB) regularly. As of 31 May 1999, 63 of these systems are Y2K compliant, with the remainder, for the most part previously scheduled installations of replacement equipment, projected to be finished by September 1999. However, our master list contains more than 300 entries, which includes a large number of non-mission critical, but nevertheless important, other systems and pieces of equipment. The Coast Guard Operations Systems Center (OSC) at Martinsburg, West Virginia has a **comprehensive database (Y2K DB)** containing not only the Coast Guard's 74 mission critical systems

and their status, but also a large number of other Coast Guard systems. The database is **accessible via the CG Intranet.**

To illustrate the extensiveness of the repair work required, the Marine Safety Information System, or **MSIS**, one of the Coast Guard's moderate size systems, has as many as **100,000 lines of date sensitive code**. Other CG systems have over 1 million lines of code. All must be scanned and corrected. And this is a system that was not originally intended to be in use after 2000! Yet we must fix the system, because it is so essential to the way MSOs do business (e.g., 3-year vessel inspections) and its replacement system can not be fully implemented until after 2000.

Because of our tremendous reliance on technology in a streamlined Coast Guard, repair of our systems is a **top priority of the Commandant**. In setting out his top priorities for '99, Admiral Loy named the following: Rebuilding the work force, **preparing for Y2K**, and supporting the work of the Interagency Task Force on Roles and Missions of the Coast Guard.

The Coast Guard Headquarters **Y2K staff**, under the direction of the Director of Information and Technology, RADM George Naccara, consists of a program director (O-6), 16 full time and 9 part time staffers, and 9 contractors who compile the quarterly reports to OMB, maintain a Y2K database, answer departmental and congressional data calls, prepare congressional testimony, track CG costs, compile budgets and disburse supplemental Y2K funding from Congress, oversee Y2K testing and CIO verification

efforts, coordinate domestic and international outreach to the marine industry, oversee continuity of operations and operational evaluation efforts, maintain extensive liaison with emergency preparedness initiatives in other government agencies, and serve as the clearing house for Y2K information. They can be reached at (202) 267-1742 or (202) 267-1275. E-mail with questions or program input can be sent to Y2K@comdt.uscg.mil

Outside Headquarters, literally hundreds of Y2K team members across Areas, MLC's, Districts, and individual units are devoting long hours of intensive preparation for Y2K. They are inventorying and repairing equipment and computer applications, and are developing local contingency plans for possible impacts of the Y2K problem on Coast Guard missions, to ensure that the Coast Guard remains "Semper Paratus."

The CG Y2K Team issued version 2.0 of the **CG Y2K Management Plan in November 1998**. The Plan lays out the Coast Guard 5 phase strategy to deal with Y2K issues in its systems and equipment, and sets forth the OMB reporting requirements. Though we have **adopted OMB's timelines of 9/98 to complete renovation; 1/99 to complete validation (testing); and 3/99** to complete **implementation** of the Y2K-compliant solutions, 11 systems remain behind as of 1 June 1999. We expect to have all systems but one complete and Y2K ready by June 1999, with the last one ready by September 1999. (A status sheet on these final systems is attached.) Version 2 of the management plan has been reissued with an expanded section on testing. It is accessible on the Coast Guard Intranet at http://www.uscg.mil/systems/library/y2k.htm.

As noted, repair and testing efforts are complete on 63 of the 74 mission critical systems, the others will be complete by September 1999, in time to ensure continuity of Coast Guard operations. These mission-critical systems support a wide range of Coast Guard functions. We are confident that **our ability to perform our core missions/services** for the maritime community will not be interrupted by Y2K related problems. Our ships will operate, and our planes will fly. Small problems may occur, but major system failures affecting the public and our mission performance should not.

Program sponsors have prepared **contingency plans** for all of the critical systems to ensure we are able to continue delivering service to the public should a Y2K-related problem develop. In addition, the Commandant in **ALCOASTs 087/98 and 106/98** launched a Coast Guard-wide continuity of operations planning effort called **Operation Millennium Approach** to deal with all potential disruptions, whether to our own systems, or to public infrastructure, suppliers, or industry partners, which could impact the CG's ability to perform its missions. Coast Guard commands and units, from Atlantic and Pacific Area through the Districts to the unit level, have written and submitted **Business Continuity Contingency Plans (BCCP**) that address a wide range of disruptions they may encounter, and list a range of optional workarounds that these units may call upon to maintain operational readiness. In June the Coast Guard will finish and submit to the Department of Transportation an **overarching Coast Guard BCCP** that addresses the 17 core business functions (examples: promoting maritime safety and law enforcement, managing navigable waters, managing human resources, providing legal support, acquiring resources) as identified by a cross-programmatic team. A Y2K

Incident Management Team (IMT) has been set up at Coast Guard Headquarters with RADM Naccara as Incident Commander. The Incident Management Team is organized according to Incident Command System (ICS) principles, with CAPT Richard Tinsman as Deputy Incident Commander, and senior officers (normally at the O-6 level) in the roles of Operations Policy, Planning, Logistics and Financial Sections Chiefs. (More information about IMT organization and activities can be obtained at the **IMT WEBSITE: cgweb.comdt.uscg.mil/g-opf/y2k.htm**. As an adjunct to this effort, the Coast Guard has evaluated the readiness of its **platforms** (ships and aircraft), including mission critical and non-mission critical systems aboard (or installed), to ensure that these platforms will be at full readiness on the critical dates. As a component of this effort, a serious second look is being taken at embedded chips aboard ships and aircraft, since embedded chips, especially those that may not be part of a mission critical system, constitute one of the significant unknowns that may impact Y2K readiness.

The Coast Guard is participating in the multi-phase joint service **"Positive Response Y2K"** exercise during the spring and summer of 1999. Its purpose is to evaluate the Y2K readiness of our platforms and to test mobilization preparedness in the case of Y2K impacts. Further, over 100 exercises planned by Coast Guard commands across the country during 1999 will contain Y2K response elements. The Coast Guard also maintains **extensive liaison with emergency planners from other federal agencies**, DOT as well as others, and will participate in at least two inter-agency exercises during the remainder of the year to test the ability of agencies to coordinate response activities.

To prepare its own personnel and their families for Y2K, the Coast Guard has published a **Y2K Personal Preparedness Brochure**, that will be mailed to all Coast Guard families, active duty, reserve, auxiliary, and civilian, as well as retirees, in June or July 1999.

A major area of concern for the Coast Guard is the Y2K readiness of the international maritime community. Modern ships carry multiple computerized systems. There are fire alarm and sprinkler systems, engine management and alarm systems, radar and navigation systems, cargo handling and tank control systems, and communications networks. The ports they call at also have extensive computer-based infrastructure, including cargo terminal systems and equipment, and traffic management systems. Of concern in the commercial fleet and in many automated facility systems are the large number of embedded chips, found not only in navigational equipment, but also throughout the ship, for example in engine and cargo monitoring systems, or fire suppression and security systems. As noted above, these microprocessors constitute a significant unknown in Y2K preparedness, as they can be difficult to locate, exceptionally difficult and risky to test, and there may be date sensitive functions in use within them when it might appear that the equipment is not date sensitive

Coast Guard Captains of the Port (COTP) are taking a lead role in preparing port communities for Y2K, working with local port safety groups and maritime associations to ensure contingency plans are prepared for potential areas of Y2K disruption in the port. **All COTPs gathered in Washington, DC in early May** to review and finalize a Y2K enforcement policy, and received orientation in the use of a risk assessment matrix

that is contained in the **Coast Guard Y2K Port Guidelines**. The Guidelines are the product of a best in class study of the Y2K readiness activities of all the COTP zones. The Y2K enforcement policy will be published in the form of a Navigation Circular, and in the Federal Register, in June. It will be based on the International Maritime Organization (IMO) Circular Letter 2121 (see below). An exercise of the information exchange procedures contained in the IMO circular, and in the use of the Port Guidelines Y2K risk assessment matrix, will be conducted in cooperation with a couple of commercial shipping companies in Los Angeles/Long Beach on June 14th and 15th. Procedures and lessons learned from that event will be compiled into a process guide or "template" that will be provided to national Y2K coordinators when they meet at the United Nations on June 21-23, and to the remainder of Coast Guard Captains of the Port, some of whom will conduct similar exercises in the coming months.

The Coast Guard has also maintained an aggressive outreach effort that includes:

- A Headquarters **web site** in the office of G-M with Y2K information. The site can be found at: www.uscg.mil/hq/g-m/y2k.htm
- CG co-sponsored **Y2K conferences and industry days** with Maritime Assns. and industry/professional organizations on the east, west, and Gulf coasts, and on the Great Lakes and Inland Rivers**.**
- **Speaking engagements** by the Coast Guard CIO and his staff to a number of professional and trade association groups in numerous cities, including New York, Pittsburgh, Ottawa, London, Geneva, New Orleans, Portland, OR,

Cleveland, Caracas, Cancun, and Vancouver, to name a few. These will continue throughout 1999.

- At the request of John Koskinen, Chair of the President's Council on the Year 2000 Conversion, and UN Ambassador Ahmad Kamal of Pakistan, **the Coast Guard** has spearheaded **an international effort to address Y2K issues in the global Marine Transportation System (MTS)**. The effort commenced with a **meeting**, co-hosted by the Coast Guard and the UK Maritime and Coastguard Agency, of **16 key international maritime trade associations** at the Headquarters of the International Maritime Organization (IMO) **in London on March 3 and 4, 1999.** Participants finalized a "**Year 2000 Code of Good Practice**" which the IMO immediately issued as **IMO Circular Letter 2121.** The Code includes not only questionnaires for the exchange of Y2K readiness information between ships, ports, and terminals, but contingency planning guidance, and lists of critical ship and port systems. The Code will form the basis of U. S. Coast Guard Y2K enforcement policy, and we advocate its use worldwide as a means of achieving consistency in Y2K communications and port entry policy. Meeting documents and video of some of the plenary sessions at the IMO meeting can be found at: www.tvontheweb.com – click on "maritime education and training"
- The Coast Guard Navigation Center (NAVCEN) is the DoT agent for Civil **Global Positioning System (GPS) issues**. The NAVCEN Navigation Information Service (NIS) Web site has information on the GPS issue, and has

been alerting GPS users to confirm the Y2K compliance status of their GPS receivers. The infoline at NAVCEN is at: (800)-368-5647

- The Coast Guard published 2 **notices** on Y2K in the **Federal Register,** one of them soliciting comment on potential Coast Guard regulatory actions related to Y2K. Carrying this initiative forward, in June1999 the Coast Guard will publish a **Y2K enforcement policy**, outlining the compliance and preparedness actions the Coast Guard will require of shipping and port facilities with respect to Y2K.
- The Coast Guard is distributing a **Y2K flyer** to owners of documented vessels, to CG Marine Safety Offices and to CG Auxiliary members for further distribution to the commercial vessel and boating public during inspections, boardings, and boating safety classes.

To meet **burgeoning CG Y2K costs** that were not included in any budget appropriation, the Coast Guard has received 4 cycles of **supplemental FY99 funding totaling about $40M.** These funds are to cover a portion of **total CG reported and projected Y2K costs of $50M** since 1996. These costs continue to grow.